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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,704	03/15/2004	Jozef Babiarz	57983.000171	8973

21967 7590 10/30/2007

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EXAMINER

JAIN, RAJ K

ART UNIT	PAPER NUMBER
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2616

MAIL DATE	DELIVERY MODE
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10/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/799,704	BABIARZ ET AL.	
	Examiner	Art Unit	
	Raj K. Jain	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20071017</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21 and 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. According to MPEP 2106 [R-5] "When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement." Claims 21 and 22 recite a "signal embodied in at least one carrier wave" this is non-statutory according to above statement and therefore appropriate correction is required of the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-11 and 14-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kelly (An ECN Probe Based Connection Acceptance Control) paper.

Regarding claim(s) 1 and 23, Kelly discloses a method for end-to-end admission control of real-time packet flows in a network having a plurality of network elements (Fig. 2, Section 2), the method comprising:

transmitting at least one probe packet from a first network element to a second network element via a network path (section 4, host A sends a probe packet to host B); determining, at at least one intermediate network element on the network path (section 1 col 2 last para, routers within the network of end-to end systems act as intermediate network elements on the network path), at least one flow rate associated with a plurality of packets (section 4 col 2 para 2, target rate R is the flow rate of host A);

marking at least one predetermined bit in the at least one probe packet if the at least one flow rate is greater than a predetermined rate (Section 4 col 1 para 2 ECN bit is marked if flow rate exceeds a predetermined threshold); and

controlling an admission of additional packets into the network based at least in part on the marking of the at least one predetermined bit in the at least one probe packet (Section 4 para 3 host A controls admission of packets based on the congestion state and Acknowledgements of probe packets received back from host B).

Regarding claim(s) 2 , Kelly discloses denying the admission of the additional packets into the network if the at least one predetermined bit in the at least one probe packet is marked (Section 4 para 2 host A controls admission of packets based on the congestion state and Acknowledgements of probe packets received back from host B)..

Regarding claim(s) 3, Kelly discloses network congestion or link congestion from one host to another host, either from Host A to Host B or vice versa (Section 4 para 2 lines 12-14).

Regarding claim(s) 4, Kelly discloses where the first network element echoes information associated with the at least one second predetermined bit in the at least one

second probe packet in a transmission to the network (Again as in claim 3 Host A will echo back see Section 4 para 2).

Regarding claim(s) 5, Kelly discloses the admission of the additional packets is based at least in part on priorities or importance of the plurality of packets and the additional packets (col 7 para 2).

Regarding claim(s) 7, Kelly discloses information associated with the at least one predetermined bit in the at least one probe packet is communicated to at least one of the first network element and the second network element (Fig. 2, shows distributed network elements with intermediate elements in-between).

Regarding claim(s) 8, Kelly discloses where the at least one intermediate network element is part of a bandwidth-limited path in the network (Fig. 2, intermediate node has bandwidth of 30Mbps as opposed to source and sink nodes with 1000Mbps).

Regarding claim(s) 9-11, Kelly discloses where the plurality of packets comprise real-time voice packets traversing (abstract, section 2).

Regarding claim(s) 14, Kelly discloses where the at least one predetermined bit is part of a Differentiated Services field in an IP header of the at least one probe packet (col 7 para 2).

Regarding claim(s) 17 & 18, Kelly discloses encoding the at least one predetermined bit in the at least one probe packet based at least in part on the at least one flow rate and stopping the flow rate (Section 4 para 2).

Regarding claim(s) 15 & 16, Kelly discloses the predetermined rate is based on a network bandwidth allocated for the plurality of packets (Col 6 para 1, the rate is dependent on network congestion and therefore inturn to network bandwidth).

Regarding claim(s) 19 & 20, Kelly discloses lowering a transmission rate between the first network element and the second network element or between any two network endpoints (Section 6.3, col 12 paras 2 & 3, varying traffic loads levels are set within the TCP connections and traffic is delayed as appropriate).

Regarding claim(s) 21 & 22, Kelly discloses simulations being performed (section 5 & 6) which incorporate computer algorithms to be executed by specific elements (routers, switches, computer processors etc) within a system.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 12, 13, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelly as applied to claim 1 above, and further in view of Li et al (US 20040192312 A1).

Kelly fails to disclose multimedia application usage within its network.

Li discloses multimedia application usage within its network (para 33). The use of multimedia applications allows for service providers to offer additional applications

that require larger amounts of bandwidth including audio, video and file transfers. Furthermore regarding claim 21 and 22, Li discloses the use of a computer algorithm to perform explicit congestion notification (paras 50, 68). Incorporating multimedia bandwidth allocation scheme of Li within Kelly's application would enhance overall network performance to allow and accommodate for varied applications as desired by the end users. Thus it would have been obvious at the time the invention was made to incorporate the teachings of Li within Kelly so as to enhance overall network performance.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raj K. Jain whose telephone number is 571-272-3145. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 2616

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Raj K. Jain

/Raj K. Jain/

Art Unit 2616

October 17, 2007